

What we claim is:

[1] An information recording method which is a file system managing files hierarchically by files having information and a directory which is a storage place of a plurality of files, wherein

a file system which writes in and reads from a recording medium per predetermined unit is used, and predetermined information is first recorded in a work sector before performing primary recording as well as the number of mountings of the file system is further recorded in the work sector.

[2] The information recording method according to claim 1, wherein the work sector comprises two sectors, and wherein the number of mountings is recorded in a first sector, and information contents to be recorded are recorded in a second sector.

[3] The information recording method according to claim 2, wherein the work sector is located in a work sector area having a plurality of sectors, and the work sector is determined when the file system is mounted.

[4] The information recording method according to claim 3, wherein the predetermined information is information about a directory.

[5] The information recording method according to claim 4, wherein the file system is a FAT file system.

[6] A device for recording and/or reproducing information, wherein the information recording method according to any one of claims 1, 2, 3, 4 and 5 is used.

[7] An information recording method which is a file system managing files hierarchically by files having information and a directory which is a storage place of a plurality of files, wherein

a file system which writes in and reads from a recording medium per predetermined unit is used, and information about the directory is separated by a predetermined offset and a plurality of the information pieces are written in the predetermined unit.

[8] The information recording method according to claim 7, wherein

the file system is a FAT file system.

[9] The information recording method according to claim 7, wherein the predetermined offset is half of the predetermined unit, and the information about the directory is doubly written.

[1 0] A device for recording and/or reproducing information, wherein the information recording method according to any one of claims 7, 8 and 9 is used.

[1 1] An information recording or reproducing method which records main information as a file as well as updates a database file about the main information, wherein

update of the database file is performed by updating a main database file, and update of database files for backup is performed after completion of updating the main database file, and

during the update of each database file, a flag to indicate updating condition in the file is set to be in a condition indicating being updated.

[1 2] The information recording or reproducing method according to claim 11, wherein

the database files for backup consist of a first backup file and a second backup file, and the second backup file is updated after completion of updating the first backup file.

[1 3] The information recording or reproducing method according to claim 12, wherein

the flag to indicate updating condition in the file further has a condition to indicate update completion, and

the flag to indicate updating condition of the database file whose update is completed is set to be in the condition of update completion.

[1 4] The information recording or reproducing method according to claim 13, wherein

flags to indicate updating conditions of the main database file, the first and the second database files for backup are checked during system start-up, and a recovery process of the database file is performed based on the database

file whose update is completed when not all of the flags to indicate updating conditions are in the condition of update completion.

[15] The information recording or reproducing method according to claim 14, wherein

the main database file, the first and the second database files for backup further include file identifying information to identify a file of main information, and predetermined process is performed based on the file identifying information during system start-up.

[16] A device for recording and/or reproducing information comprising:
a recording means for recording main information as a file; and
a database file updating means for updating database files composed of a main database file about the main information and database files for backup, wherein

the database file updating means updates the main database file, and updates the database files for backup after completion of updating the main database file, and

during the update of each database file, a flag to indicate an updating condition of the file is set to be in a condition indicating being updated.

[17] The device for recording and/or reproducing information according to claim 16, wherein

the database files for backup consist of a first backup file and a second backup file, and the second backup file is updated after completion of updating the first backup file.

[18] The device for recording and/or reproducing information according to claim 17, wherein

the flag to indicate updating condition in the file further has a condition to indicate update completion, and the flag to indicate updating condition of the database file whose update is completed is set to be in the condition of update completion.

[19] The device for recording and/or reproducing information according to claim 18, wherein

flags to indicate updating conditions of the main database file, the first

and the second database files for backup are checked during system start-up, and

a recovery process of the database file is performed based on the database file whose update is completed when not all of the flags to indicate updating conditions indicate update completion.

[20] The device for recording and/or reproducing information according to claim 19, wherein

the main database file, the first and the second database files for backup further include file identifying information to identify a file of main information, and predetermined process is performed based on the file identifying information during system start-up.